



COVID-19 Vaccines

Pfizer-BioNTech, Moderna, AstraZeneca/COVISHIELD & Janssen (Johnson & Johnson)

Updated March 17, 2021

Risks from having COVID-19

[COVID-19](#) is a viral infection that mainly affects the lungs. People of all ages can be infected. The risk of getting COVID-19 may be higher for some people because of where they live or work. Older adults and people with a health condition are more likely to become severely ill from COVID-19. Even with mild illness, some people may have symptoms months after the infection is gone. COVID-19 infection can cause damage to the lungs, heart or brain. Long-term symptoms may include fatigue, shortness of breath, trouble concentrating, muscle aches, and other symptoms.

As the coronavirus that causes COVID-19 continues to change into new variants, it can spread infection more easily, and cause more serious illness. Different variants are now circulating in Ontario. Public health measures, such as physical distancing, and vaccines will protect you against these variants.

How the Vaccines Work

COVID-19 vaccines give our body instructions to boost our immune system to develop antibodies that will protect us from COVID-19 infection. COVID-19 vaccines are used for individuals 16 to 18 years of age and older, including seniors. Three of the vaccines approved for use in Canada require two-doses. The Janssen (*Johnson & Johnson*) vaccine only needs one dose. The vaccine does not contain the virus that causes COVID-19, and so it cannot give us this infection.

Vaccine Benefits

All COVID-19 vaccines have been shown to protect people against severe illness from COVID-19. It takes two weeks after vaccination for our body to build a good immune response. All vaccines are safe for people with health conditions such as heart or lung problems, diabetes or high blood pressure. The vaccine is also safe for people with an auto-immune condition, or weakened immunity from illness or treatment, but the vaccine may not work as well in people with these conditions.

There is a small chance that you may still get COVID-19 after vaccination. Currently, there is no information on how long the vaccine's protection will last. A booster dose may be recommended in the future.

Vaccine ingredients / allergies

The vaccines contain lipids, salts, sugars and buffers. The vaccine does not contain eggs, gelatin, latex, preservatives, antibiotics, or aluminum. Allergies to the COVID-19 vaccines are rare. The vaccines are safe, even if you have food, drug or environmental allergies. Speak with your doctor first if you have severe allergies to polyethylene glycol, tromethamine or polysorbate.



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Side Effects and Risks

Approximately one in every 10 people vaccinated may have side effects – most are mild to moderate, and will go away in a few days. Common side effects include redness, pain, itchy or swelling at the injection site, fever, headache, feeling tired, muscle aches, joint pain, chills, nausea and/or vomiting.

Side effects usually last one to three days, and usually means that our body is developing an immune response to the vaccine. In rare cases, serious allergic reactions (anaphylaxis) can occur. Allergic reactions can be treated and are usually temporary. Seek medical attention if you have trouble breathing, or develop hives or swelling in the face and throat. If you have a reaction to the vaccine, tell your health care provider and they will report the symptoms to public health. Public health is keeping track of reported side effects to ensure the vaccine continues to be safe.

Delay vaccination

If you have a fever or COVID-19 symptoms, wait until you are feeling better before getting vaccinated. COVID-19 vaccines should also not be given at the same time as other vaccines. If you have just received another vaccine, wait 14 days before getting the COVID-19 vaccine.

Consult a health care provider

Speak with your health care provider or allergist first before getting the vaccine if you:

- are pregnant, could be pregnant or are breastfeeding;
- have an auto-immune condition; or weakened immunity from illness or treatment;
- had an allergic reaction within four hours after receiving your first dose of COVID-19 vaccine; or
- have severe allergies to any vaccine ingredients.

Continue to protect yourself and others

Until there are enough vaccines for everyone who wants to be vaccinated, it is important to continue physical distancing, wearing a mask, and staying home if you are sick. Health care workers and staff must wear personal protective equipment (PPE), even after vaccination.

For more information

Talk to your health care provider or visit our website at toronto.ca/COVID19.

Resources

National Advisory Committee on Immunization. *Recommendations on the use of COVID-19 Vaccines*. March 16, 2021. Available at <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-covid-19-vaccines.html>